# Texas Nurse-Family Partnership Statewide Grant Program Evaluation Report

As Required By S.B. 156 80<sup>th</sup> Legislature, Regular Session, 2007

Health and Human Services Commission December 2010

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#### **Executive Summary**

Pursuant to S.B. 156, 80<sup>th</sup> Legislature, Regular Session, 2007, the Health and Human Services Commission (HHSC) submits the *Texas Nurse-Family Partnership Statewide Grant Program Evaluation Report*. This report details the establishment of the Texas Nurse-Family Partnership (TNFP) competitive grant program with a process and preliminary outcome evaluation of the program implementation in its second grant year.

The TNFP program is a voluntary, evidence-based home visitation program shown to improve the health and well-being of low-income first-time mothers and their children. Specially trained registered nurses regularly visit the homes of participating mothers to provide services designed to:

- improve pregnancy outcomes,
- improve child health and development,
- improve family economic self-sufficiency and stability, and
- reduce the incidence of child abuse and neglect.

Nurse-Family Partnership (NFP) programs are located in 32 states. Organizations implementing NFP programs receive professional guidance from the Nurse-Family Partnership National Service Office (NFPNSO), the nonprofit organization which has oversight of the implementation of the NFP model developed by David Olds. NFP programs are required to provide NFPNSO with extensive data, which is used to monitor fidelity to the NFP model, improve service delivery and outcomes, and expand the research on the model.

In the initial RFP, grants were issued for the expansion of one existing NFP site and the development of ten new NFP sites. Each grantee was located in an organization known for providing prevention services, and had the organizational structure to support the implementation and operation of an NFP program. The 11 TNFP sites are located in the cities of Austin, Dallas, Fort Worth, Houston, Lubbock, Port Arthur, and San Antonio. They serve 23 counties: Bexar, Chambers, Crosby, Dallas, Floyd, Fort Bend, Galveston, Garza, Hale, Hardin, Harris, Hockley, Jefferson, Lamb, Liberty, Lubbock, Lynn, Montgomery, Orange, Tarrant, Terry, Travis, and Williamson.

The initial grant period was September 2008 through August 2009, and grant contracts could be extended for an additional six years, contingent upon the availability of funds. The grants account for 90 percent of the total cost of the program. HHSC required local communities to secure funding for approximately 10 percent of the program cost and to provide administrative staff time, physical space, and utilities. All grantees have direct contracts with HHSC. The current report describes program activity from September 2008 through June 2010.

The TNFP program began implementation on September 1, 2008, by hiring staff and ensuring the completion of NFPNSO mandatory staff training. The first home visit was on September 29, 2008, and all sites were serving clients by the end of January 2009.

For fiscal year 2009, the cost estimate to serve approximately 2,000 clients was \$9.4 million. The Texas Legislature appropriated \$7.9 million, providing TNFP with the ability to serve 1,800

clients. In 2009, the 81<sup>st</sup> Texas Legislature approved HHSC's request for \$17.8 million to fund the existing TNFP sites and expand services to 200 more clients in the 2010-11 biennium.

In December 2009, HHSC issued a request for proposals (RFP) to expand the TNFP program to include an additional 200 clients, increasing the total potential number of clients served to 2,000. HHSC received four proposals and awards were made to the top two: one from the YWCA of Dallas, and the other from the University Medical Center (UMC) in El Paso. In 2006, the YWCA of Dallas was awarded funds through DFPS to initiate the first TNFP pilot program. In 2008, additional funds were awarded to YWCA of Dallas to expand their program to eight nurse home visitors serving 200 clients. In 2010, the YWCA submitted a proposal and was awarded the funds to expand this site to twelve Nurse Home Visitor serving 300 clients. The UMC will provide NFP services to 100 clients in the El Paso area. HHSC entered into contracts with the YWCA of Dallas and the UMC in El Paso on September 1, 2010.

The primary goal of the process evaluation was to address whether the TNFP sites implemented the program in accordance with the NFPNSO program objectives, and whether each TNFP site adhered to 18 performance indicators, or NFPNSO model standards, that addressed seven areas of implementation. Evaluation findings are based primarily on standardized NFPNSO reports and supplemental data provided by TNFP program staff.

Key findings of the process evaluation data are as follows.

- As a funding condition, TNFP grantees were required to adhere to the TNFP program model standards developed by the NFPNSO. All TNFP sites successfully adhered to the 18 model standards with the exception of Standard 14, which is related to one-to-one supervision, weekly case conferences and team meetings, and field supervision. All TNFP sites partially met the requirements of Standard 14.
- TNFP enrolled 2,286 low-income first-time mothers in the first 22 months of providing services, from September 1, 2008, to June 30, 2010. Ninety-six percent of the clients began receiving program services before their 29<sup>th</sup> week of pregnancy.
- The average age of TNFP clients was 19 years, and ranged from 11 years to 42 years. The majority of clients were Hispanic and African-American, 55 percent and 30 percent respectively. The percent of Hispanic TNFP clients was greater than the NFP national average of 25 percent, reflecting the demographic makeup of Texas residents. Eleven percent of TNFP clients were married, 24 percent were working either full- or part-time, and 45 percent had an annual household income of \$12,000 or less.
- Upon enrollment in the TNFP program, 69 percent of TNFP clients were on Medicaid, 71 percent were receiving Women Infants and Children (WIC) benefits, 27 percent were receiving Supplemental Nutrition Assistance Program (SNAP) subsidies, and 12 percent were receiving Temporary Assistance for Needy Families (TANF) assistance.
- Between September 1, 2008 and June 30, 2010, the TNFP program made 5,288 referrals to public programs. Of these, 36 percent were for WIC services, 31 percent for Medicaid, and 13 percent for SNAP. The remainder of referrals were made to other services, including mental health, substance abuse, and health-care services.
- Information about the establishment of paternity was provided to 100 percent of clients, resulting in paternity being established for 213 clients. Evaluators were not able to determine

- definitively the number of mothers who established paternity as a result of TNFP services. Only those clients who established paternity prior to the birth of their babies are included.
- While the numbers are still small due to the limited time of program operations, an examination of preliminary program outcomes shows results comparable to NFP national averages on levels of preterm birth, low birth weight, rates for breastfeeding initiation, immunizations, subsequent pregnancies at 6-months postpartum and rates of domestic violence.

#### **Introduction**

The *Texas Nurse-Family Partnership Statewide Grant Program Evaluation Report* is submitted pursuant to S.B. 156, 80<sup>th</sup> Legislature, Regular Session, 2007. S.B. 156 required the Health and Human Services Commission (HHSC) to award Texas Nurse-Family Partnership (TNFP) grants to public or private entities, including nonprofits, counties, municipalities, or other political subdivisions of Texas. The purpose of the grants was to establish (or expand existing) TNFP programs and operate those programs for at least two years.

HHSC had to consider several factors in determining which applicants to fund, including:

- the need for the program in the community in which the proposed program would operate, and
- the applicant's ability to comply with requirements to adhere to the NFP model (including meeting data collection standards).

#### **Background**

The NFP program is a voluntary, evidence-based home visitation program shown to improve the health and well-being of low-income first-time mothers and their children. <sup>1,2</sup> Specially trained registered nurses regularly visit the homes of participating mothers to provide NFP services. TNFP follows the three-goal national NFP model, and includes a fourth service delivery goal. As such, TNFP works with participants to achieve the following four program goals:

- improve pregnancy outcomes,
- improve child health and development,
- improve family economic self-sufficiency and stability, and
- reduce the incidence of child abuse and neglect.

The first NFP pilot program was implemented almost 15 years ago. Since then, NFP programs have expanded to 32 states and have served more than 100,000 women nationally. Organizations implementing NFP programs receive professional guidance from the Nurse-Family Partnership National Service Office (NFPNSO), the nonprofit organization which has oversight of the implementation of the NFP model developed by David Olds. NFP programs are required to provide extensive data to NFPNSO, which is used to monitor fidelity to the NFP model, improve service delivery and outcomes, and expand the research on the model.

Longitudinal studies on NFP programs around the country have shown long-term benefits of the program that include decreased rates of premature birth, increased relationship stability, improved academic adjustment to elementary school, and reduction of childhood mortality from preventable causes. A minimum amount of participation needed to benefit from the program has not been

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<sup>&</sup>lt;sup>1</sup> Olds, D.L., Henderson, C.R. Jr, Tatelbaum, R., & Chamberlin, R. (1986). Improving the delivery of prenatal care and outcomes of pregnancy: A randomized trial of nurse home visitation. *Pediatrics*, 77(1), 16-28.

<sup>&</sup>lt;sup>2</sup> The TNFP program originated in Colorado, and the first TNFP site was in Elmira, New York in 1978. TNFP mothers from Elmira and their children have been followed since 1978.

established; however research indicates that the beneficial impact increases as the amount of participation increases.<sup>3</sup>

National NFP research findings over the course of the program demonstrate a:

- 79 percent reduction in preterm delivery, 4
- 23 percent reduction in subsequent pregnancies,<sup>5</sup>
- 20 percent reduction in the use of public programs, <sup>6</sup>
- 48 percent reduction in cases of child abuse and neglect, <sup>2,3,5</sup>
- 39 percent reduction in injuries among children of low-income mothers<sup>7</sup>, and
- 56 percent reduction in emergency room visits for accidents and poisonings.<sup>8</sup>

In addition, a RAND Corporation independent analysis found that the return for each dollar invested in an NFP program was more than 5 dollars for higher-risk populations served, and almost 3 dollars for all individuals served by the NFP program. Four types of governmental savings were identified, including:

- increased tax revenues;
- decreased need for public assistance;
- · decreased expenditures for education, health, and other services; and
- decreased participation in the criminal justice system.

#### **NFP Standards**

Before becoming an NFP implementing agency, the candidate agency must affirm its intention to adhere to the validated NFP model when delivering the program to clients. Such fidelity requires the observance of all NFP model standards (also known as model "elements"). These standards are based on research, expert opinion, field lessons, and/or theoretical rationales. The NFPNSO research suggests that if a program is implemented in accordance with these model standards, the

<sup>&</sup>lt;sup>3</sup> Nurse-Family Partnership National Serivce Office. (2008). Nurse-Family Partnership Model Elements.

<sup>&</sup>lt;sup>4</sup> Olds, D.L., Henderson, C.R. Jr, Tatelbaum, R., & Chamberlin, R. (1986). Improving the delivery of prenatal care and outcomes of pregnancy: A randomized trial of nurse home visitation. *Pediatrics*, 77(1), 16-28.

<sup>&</sup>lt;sup>5</sup> Kitzman, H., Olds, D.L., Henderson, C.R. Jr, Hanks, C., Cole, R., Tatelbaum, R., McConnochie, K.M., Sidora, K., Luckey, D.W., Shaver, D., Engelhardt, K., James, D., & Barnard, K. (1997). Effect of prenatal and infancy home visitation by nurses on pregnancy outcomes, childhood injuries, and repeated childbearing: A randomized controlled trial. *Journal of the American Medical Association*, 278(8), 644-652.

<sup>&</sup>lt;sup>6</sup> Olds, D., Kitzman, H., Cole, R., Robinson, J., Sidora, K., Luckey, D., Henderson, C., Hanks, C., Bondy, J., & Holmberg, J. (2004). Effects of nurse home visiting on maternal life-course and child development: Age-six follow-up of a randomized trial. *Pediatrics* 114, 1550-1559.

<sup>&</sup>lt;sup>7</sup> Reanalysis of Kitzman et al. (1997). *Journal of the American Medical Association*, 278(8), 644-652. This particular outcome reflects a reanalysis of data from the Elmira trial using an updated analytic method conducted in 2006.

<sup>&</sup>lt;sup>8</sup> Olds, D.L., Henderson, C.R. Jr, Chamberlin, R., & Tatelbaum, R. (1986). Preventing child abuse and neglect: A randomized trial of nurse home visitation. *Pediatrics*, 78(1), 65-78.

<sup>&</sup>lt;sup>9</sup> Karoly, L.A., Kilburn, M.R., & Cannon, J.S. (2005). *Early Childhood Interventions: Proven Results, Future Promise*. The Rand Corporation: Santa Monica, CA.

implementing agencies can have reasonably high levels of confidence that results will be comparable to those found in the clinical trials. Conversely, it suggests that if implementation does not meet model standards, results could differ from research results.

NFPNSO requires every NFP program to follow 18 model standards. These standards cover seven areas of implementation. A detailed description of each of the standards is included in the process evaluation (see page 19).

#### **TNFP Grants**

The TNFP program began in Texas in 2006 when the YWCA of Metropolitan Dallas utilized Texas Department of Family and Protective Services (DFPS) Prevention and Early Intervention funds to implement the first NFP program. A year later, the Texas Legislature passed S.B. 156, which directed HHSC to use a competitive grant process to expand the NFP program to sites throughout Texas.

HHSC issued a request for proposals (RFP) in February 2008 and received 12 proposals. In September 2008, HHSC issued grants to nine organizations. The Dallas YWCA was awarded a grant to expand its existing NFP program, and eight other grants were awarded for the development of the ten new TNFP sites. In 2010, HHSC entered into contracts with the three separate agencies implementing NFP in the Houston TNFP consortium (Baylor, Houston DHHS, and Texas Children's Health Plan) and terminated the contract with Health Family Initiatives as the lead agency for the Houston TNFP consortium. This brought the number of implementing agencies receiving HHSC grant funds for their NFP programs to eleven.

In December 2009, HHSC issued a request for proposals (RFP) to expand the TNFP program to include an additional 200 clients, increasing the total potential number of clients served to 2,000. HHSC received four proposals and awards were made to the top two: one from the YWCA of Dallas, and the other from the University Medical Center (UMC) of El Paso. In 2008 TNFP provided funding to the YWCA of Dallas to expand their program (funded by DFPS) to include an additional 200 clients. With the additional TNFP funding provided to the YWCA through the 2009 RFP, TNFP will assume the funding responsibilities for all 300 of the YWCA of Dallas clients. The UMC will provide NFP services to 100 clients in the El Paso area. Therefore, there are currently twelve TNFP sites across Texas (Figure 1).

Figure 1. TNFP Program Sites

The initial grant period was September 1, 2008, through August 31, 2009. The grant contracts may be extended for an additional six years contingent upon the availability of funds. The Fiscal Year 2010 grant amounts account for 90 percent of the total cost of the program (see Table 1). In order to operate within the appropriations received and ensure substantial local commitment, HHSC required local communities to fund 10 percent of the program cost. Since FY 2010, HHSC is allowing a portion of overhead or administration costs to be included in the grant request as part of the 10 percent. Grantees are required to provide administrative staff time, physical space, and utilities, most of which is still provided as in-kind.

The TNFP program began implementation on September 1, 2008, by hiring staff and ensuring that staff completed NFPNSO mandatory training. The first home visit was on September 29, 2008, and all sites were serving clients by the end of January 2009. The first year of implementation focused on building caseloads. With the addition of the two new program sites September 1, 2010, the ongoing caseload size for the 12 grantees is expected to reach 2,000 clients.

S.B. 156 requires the TNFP program to serve approximately 2,000 clients. In 2009, the 81<sup>st</sup> Texas Legislature approved the HHSC request for \$17.8 million to fund the existing TNFP sites and expand services to 200 more clients in the 2010-11 biennium. In Fiscal Year 2010, \$7,733,395 in

grant funds were awarded to the 11 existing TNFP program sites. With the addition of the two new TNFP program sites, Fiscal Year 2011 grants are expected to be \$8,707,840. The following table shows Fiscal Year 2010 TNFP grant amounts by location.

**Table 1. Locations of TNFP Programs** 

Location	Organization	Program Capacity*	Counties Served	FY 2010 Grant Amount
Austin	Any Baby Can, Inc.	200	Travis Williamson	\$737,513
Dallas	Parkland Health and Hospital System	200	Dallas/Tarrant	\$800,040
Dallas	YWCA of Metropolitan Dallas	300	Dallas/Tarrant	\$785,292
El Paso	University Medical Center El Paso	100	El Paso	New Sept 2010
Forth Worth	Tarrant County Health Department	200	Dallas/Tarrant	\$818,701
Houston	Baylor College of Medicine Teen Health Clinics	100	Ft. Bend Harris Liberty Montgomery	\$575,370
Houston	City of Houston Department of Health and Human Services	100	Ft. Bend Harris Liberty Montgomery	\$603,562
Houston	Texas Children's Health Plan	100	Galveston Ft. Bend Harris Liberty Montgomery	\$607,042
Lubbock	Texas Tech University Health Sciences Center School of Nursing	200	Lubbock Crosby Floyd Garza Hale Hockley Lamb Lynn Terry	\$752,616
Port Arthur	City of Port Arthur Health Department	100	Chambers Hardin Jefferson Orange	\$470,104
San Antonio	The Children's Shelter	200	Bexar	\$792,753
San Antonio	University Health System	200	Bexar	\$790,402
TOTAL		2000		\$7,733,395

<sup>\*</sup>Number of clients.

# **TNFP Program Staff Descriptions**

HHSC administers the TNFP competitive grants. The HHSC TNFP team consists of:

- a state nurse consultant who provides statewide clinical support, consultation, program policy development, and technical assistance to the TNFP program sites;
- a project manager who provides statewide management and oversight of day-to-day operations, monitoring, program policy development/consultation, and technical assistance to the TNFP program sites; and
- a contract manager who oversees contracts, invoices, vouchers, deliverable receipts, and payments.

Each TNFP program site has three types of staff - nursing supervisors, nurse home visitors, and data entry specialists. The nursing supervisor manages program operations, including the supervision and evaluation of data entry specialists and up to eight nurse home visitors.

The nurse home visitor provides comprehensive nursing services to TNFP clients and their families while striving to maintain the highest standards in clinical nursing practice and adherence to the NFP model. Each nurse home visitor maintains a maximum caseload of 25 clients. A shortage of nurse home visitors (e.g., due to medical, maternity leave or severed employment) may require a re-distribution of clients that may cause a temporary caseload over 25 clients per nurse home visitor in order to continue to provide services to actively enrolled clients.

The data entry specialist provides administrative support to the nursing supervisor and nurse home visitors. Other responsibilities include data entry, office organization, client reminder calls, submitting purchase request for NFP supplies, general clerical duties, and the organization of recruitment and outreach materials.

# **Program Eligibility**

Women eligible to enroll in the TNFP program must meet all of the following requirements:

- have no previous live births,
- be enrolled before the end of the 28<sup>th</sup> week of pregnancy,
- have an income at or below 185 percent of the federal poverty level, <sup>10</sup> and
- be a Texas resident.

#### **Visitation Process/Schedule**

TNFP clients are typically enrolled early in their pregnancy, with home visits beginning between the 16<sup>th</sup> and 28<sup>th</sup> week of pregnancy. Nurse home visitors met with clients regularly from pregnancy through the child's second birthday, providing up to 65 visits throughout this period. Nurse home visitors provide ongoing assessments, a therapeutic relationship, extensive education,

<sup>&</sup>lt;sup>10</sup>Federal Register, Vol. 74 (14), January 23, 2009. U.S. Department of Health and Human Services. (http://aspe.hhs.gov/poverty/09fedreg.pdf). Federal poverty levels for 2010 are unchanged from the 2009 levels.

health literacy support, and assistance in accessing resources and health-care coverage, such as Medicaid, during pregnancy and early childhood. Ideally, visits begin early in the second trimester, between the 14<sup>th</sup> and 16<sup>th</sup> week of gestation. Nurse home visitors visit:

- weekly for the first four weeks of program participation,
- biweekly starting in week five until delivery,
- weekly from delivery until six weeks postpartum,
- biweekly starting in week 7 until the baby is 21 months old, and
- monthly for the last three months of program participation.

Prior to conducting home visits, NFPNSO requires nurse home visitors to complete extensive training on program administration, implementation issues, and the utilization of standardized data collection materials and client visit protocols. This standardization facilitates fidelity to the NFP program model.

#### **Process Evaluation**

The TNFP evaluation detailed in this report spans the first two years of grant funding from September 1, 2008, through June 30, 2010. The TNFP program began implementation on September 1, 2008, with the first home visit on September 29, 2008. All 11 of the initial program sites were serving clients by the end of January 2009.

# Methodology

Evaluators used three types of information for this report:

- NFPNSO information about NFP programs across the nation,
- information reported by the TNFP sites to NFPNSO, and
- information gathered specifically for this evaluation.

NFPNSO and HHSC provide several resources to help local programs implement the NFP model with fidelity. Evaluators obtained information about expectations for program implementation from NFPNSO websites, newsletters, and other program documents. Evaluators also used NFP research reports from other states to obtain an additional perspective on program implementation and expectations.

In addition to NFPNSO's extensive reporting requirements, HHSC has specific reporting requirements for each TNFP program site. The overarching purpose of the NFPNSO and HHSC reports is to monitor fidelity to the model and progress of program implementation. Evaluators obtained data about each site from the following reports.

- NFPNSO quarterly summary reports, which include information on enrollment and attrition, demographics, referrals, home visit frequency and content, birth outcomes, and child development.
- NFPNSO implementation reports.

- •• Client characteristics at intake reports including demographics, use of government assistance, and maternal health risks.
- •• Implementing agency caseload profile reports including the number of clients served, births, program graduates, and additional demographics.
- •• Client visitation reports including location, content, frequency, and duration.
- •• Client enrollment reports including referrals to the TNFP programs, levels of program enrollment, and weeks gestation at enrollment.
- Maternal outcomes reports including subsequent pregnancies, school enrollment, employment status, marital status, and use of public assistance programs.
- •• Pregnancy health and outcomes reports including client health during pregnancy, substance use, domestic violence, frequency of preterm birth or low birth weight, and other delivery complications.
- •• Child health and development reports including occurrence of breastfeeding, rates of immunizations, and lead screening.
- •• Service linkage reports including referrals to other programs and the use of community or government services.
- NFPNSO web-based Clinical Information System (CIS) reports, including summaries of visit characteristics, detailed demographic information, and information on the children born in the program.
- HHSC staff requirements data reports, including staff employment, training, and previous education and employment experience.
- HHSC monthly program narrative reports, including the status of program goals and objectives, problems and concerns, and accomplishments.

#### Limitations

HHSC's program evaluation met the TNFP reporting requirements of Section 531.459, Texas Government Code, with one exception. The evaluators were not able to determine with certainty the number of mothers who established the paternity of an alleged father as a result of TNFP services.

Although this report provides data about the establishment of paternity, only those clients who established paternity prior to the birth of their babies are included. It is unknown how many clients submitted Acknowledgment of Paternity (AOP) documentation during their hospital stay following the birth of their babies or at a later time point. While establishment of paternity was not part of the standard NFPNSO data collection, the number of AOPs completed in the preceding month and in the current program year was included in the monthly narrative reports submitted to HHSC for each program site.

The following issues limited the scope of the evaluation, but did not affect the degree to which the evaluation addressed legislative requirements.

- Because of the extensive NFPNSO reporting requirements, the evaluation utilized data provided to the NFPNSO by each TNFP site.
- To allow time for data entry and the reconciliation of data issues, evaluators excluded data for July and August 2010 from the report.
- The outcome analysis is limited to an analysis of TNFP participants. The outcome analysis reports national NFP statistics but does not include a Texas comparison group.

#### **TNFP Clients**

Ultimately, the active caseload size for the twelve grantees is expected to reach a total of 2,000 first-time mothers and their children. From September 1, 2008 through June 30, 2010, the TNFP program has enrolled 2,286 low-income first-time mothers. As of June 30<sup>th</sup>, 2010 the current active caseload was 1,488 clients. See Appendix A for detailed information on TNFP client demographics.

#### Age

The average age of TNFP clients was 19 years and reflected the NFP national average. Client ages ranged from 11 years to 42 years. Also similar to the NFP national average, 32 percent of TNFP clients were under age 18. The Any Baby Can program in Austin had the youngest TNFP clients with 56 percent under age 18. The Texas Children's Health Plan program had the oldest TNFP clients with 76 percent age 18 and older. The TNFP program at the University Health System in San Antonio had the greatest number of clients over age 30 (see Appendix A, A-1).

#### **Ethnicity**

Women of Hispanic descent made up the largest percentage of TNFP clients served with 55 percent, followed by African-American women with 30 percent, non-Hispanic white women with 12 percent, and 4 percent of other ethnicities (see Table 2). TNFP program clients deviated from the NFP national averages on ethnicity. NFP national client ethnicity consist of 42 percent non-Hispanic white, 25 percent Hispanic, and 22 percent African-American. TNFP programs in San Antonio had the greatest number of Hispanic clients. Seventy-five percent of the clients at The Children's Shelter and 85 percent of clients at the University Health System were Hispanic. The Baylor and Houston DHHS programs, both serving the Gulf Coast, had the greatest number of African-American clients, 57 percent and 61 percent respectively.

**Table 2. Client Race or Ethnicity** 

# **Race or Ethnicity**

	Number Enrolled	Non- Hispanic White	Hispanic	African American or Black	Native American	Asian	Multi- racial or Other	Missing (n)
Any Baby Can	257	9.0%	66.3%	22.0%	0.4%	1.2%	1.2%	3
Parkland HHS	212	4.0%	51.5%	41.9%	1.0%	0.0%	1.5%	14
Dallas YWCA	248	12.2%	39.4%	43.9%	0.9%	1.4%	2.3%	27
Tarrant County	318	19.9%	42.4%	32.9%	0.3%	1.7%	2.8%	32
Baylor	137	8.9%	32.3%	57.3%	0.8%	0.0%	0.8%	13
Houston DHHS	123	1.7%	34.2%	60.7%	0.9%	0.0%	2.6%	6
Texas Children's Health Plan	121	13.4%	48.7%	33.6%	0.8%	0.8%	2.5%	2
Texas Tech	228	19.3%	63.6%	14.9%	0.4%	0.4%	1.3%	0
Port Arthur	129	31.6%	24.6%	40.4%	0.9%	0.9%	1.8%	15
The Children's Shelter	267	7.6%	74.5%	12.0%	1.2%	0.4%	4.4%	16
University Health System	245	5.9%	84.5%	5.0%	1.3%	1.7%	1.7%	6
TNFP	2,286	11.9%	54.8%	29.5%	0.8%	0.9%	2.1%	134
National NFP	113,533	42.3%	24.6%	22.0%	4.2%	1.4%	5.4%	n/a

Time period: September 1, 2008 - June 30, 2010

#### Primary Language Spoken

Overall, English was the primary language for 85 percent of TNFP clients, while Spanish was the primary language for 14 percent. These numbers were comparable to the primary language percentages of NFP clients across the nation. In addition to bilingual nurses at each site, an interpreter/translator or a nurse home visitor capable of speaking the client's native language was available to clients whose first language was not English or Spanish (see Appendix A, A-2). 11

#### **Marital Status**

The national proportion of married NFP clients outnumbered the proportion of married TNFP clients, with 17 percent and 11 percent respectively. The University Health System program had the highest proportion of married clients with 22 percent. Only four percent of the clients in the Baylor program and five percent of the clients in the Texas Tech program were married (see Appendix A, A-3).

#### School Enrollment

The percentage of TNFP clients attending school was comparable to the percentage of NFP clients nationally, 50 percent and 45 percent respectively. Sixty-four percent of clients at The Children's Shelter program and over 50 percent of clients in the programs at Any Baby Can, Baylor, and Parkland HHS reported attending school. Thirty nine percent of the clients at the Texas Children's Health Plan and University Health System programs reported attending school. The Children's Shelter, Any Baby Can, Baylor, and Parkland HHS primarily serve teenage clients, whereas the Texas Children's Health Plan and University Health System serve clients with a broader range of ages (see Appendix A, A-3).

#### Income

Of the household income-reporting TNFP clients, 45 percent claimed an annual household income of \$12,000 or less and 44 percent reported their income to be between \$12,001 and \$30,000. Thirty-five percent of all clients did not know their annual household income; therefore, they were not included in the income percentages. The median household income for the NFP clients nationally was \$13,500 and ranged from \$1,500 to \$45,000 (see Appendix A, A-4).

<sup>&</sup>lt;sup>11</sup> NFPNSO client materials are only available in English and Spanish.

<sup>&</sup>lt;sup>12</sup> Total yearly household income was collected in nine income categories.

#### **Employment**

Twenty-four percent of TNFP clients worked either full- or part-time (see Table 3). Of this number, 39 percent were employed full-time and 61 percent part-time. These findings were similar to NFP clients nationally, where 29 percent of clients worked either full- or part-time. The 11 Texas programs varied among each other in the proportion of working clients. Thirty-three percent of Port Arthur clients and 31 percent of the Texas Children's Health Plan program clients were employed. Sixteen percent of clients from the Baylor program and 18 percent from the programs at Any Baby Can or Parkland HHS were working either full- or part-time.

**Table 3. Client Employment Status** 

## **Employment Status**

	Number Enrolled	Never Worked	Not Working	Working Full-Time	Working Part-Time	Missing (n)
Any Baby Can	258	39.1%	42.6%	4.3%	14.1%	2
Parkland HHS	212	44.8%	36.8%	8.5%	9.9%	0
Dallas YWCA	248	30.6%	42.3%	7.3%	19.8%	0
Tarrant County	318	30.7%	44.6%	11.4%	13.3%	2
Baylor	137	32.8%	51.1%	5.1%	10.9%	0
Houston DHHS	123	25.2%	49.6%	10.6%	14.6%	0
Texas Children's Health Plan	121	21.2%	48.3%	11.0%	19.5%	3
Texas Tech	228	31.7%	45.1%	8.9%	14.3%	4
Port Arthur	129	27.9%	38.8%	14.7%	18.6%	0
The Children's Shelter	267	44.7%	30.1%	9.8%	15.4%	1
University Health System	245	27.2%	46.9%	11.5%	14.4%	2
TNFP	2,286	33.5%	42.5%	9.2%	14.8%	14
National NFP	113,533	70	.2%	28.	8%	n/a

Time period: September 1, 2008 - June 30, 2010

#### Public Assistance Use

Upon enrollment in the TNFP program, the percent of TNFP clients accessing the Supplemental Nutrition Assistance Program (SNAP) and Temporary Assistance for Needy Families (TANF) services was greater than the percent of NFP clients across the nation accessing the same services (see Table 4). The Any Baby Can program reported that 40 percent of its clients were enrolled in SNAP. This percentage was much higher than the NFP national rate of 18 percent. Fifty-one percent of University Health System clients and 18 percent of Any Baby Can clients reported receiving TANF. These utilization rates were higher than the NFP national rate of seven percent.

The percentage of TNFP clients accessing Women Infants and Children (WIC) services was about the same as the national percentage of NFP clients accessing WIC. However, the Houston DHHS program had much higher WIC utilization rates than the NFP national rate, with 92 percent of clients receiving WIC assistance. The percent of TNFP clients receiving Medicaid benefits was similar to the NFP national percentage. Two exceptions were the Texas Children's Health Plan and Texas Tech programs with 92 percent and 88 percent participation respectively.

Table 4. Use of Public Assistance

	Number	Public Assistance					
	Enrolled	<b>SNAP</b>	Medicaid	TANF	WIC	Missing (n)	
Any Baby Can	258	40.4%	60.4%	18.0%	56.9%	4	
Parkland HHS	212	15.7%	62.1%	3.0%	69.2%	12	
Dallas YWCA	248	29.0%	73.9%	8.1%	76.0%	25	
Tarrant County	318	22.3%	60.6%	6.3%	71.1%	32	
Baylor	137	14.5%	66.9%	1.6%	52.4%	10	
Houston DHHS	123	29.9%	66.7%	0.9%	91.5%	5	
Texas Children's	121	21.0%	92.4%	13.4%	77.3%	3	
Health Plan							
Texas Tech	228	38.2%	87.7%	2.2%	78.5%	4	
Port Arthur	129	35.7%	65.2%	0.9%	65.2%	13	
The Children's	267	25.3%	82.6%	9.9%	73.5%	15	
Shelter							
University Health	245	16.3%	51.5%	50.6%	68.6%	8	
System							
TNFP	2,286	26.5%	69.2%	12.0%	70.6%	131	
National NFP	113,533	18.3%	67.3%	6.5%	73.1%	n/a	

Time period: September 1, 2008 - June 30, 2010

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<sup>&</sup>lt;sup>13</sup> The Houston DHHS TNFP program offices are in the Acres Home Multi Service Center, which also includes a WIC office. Through collaboration with the WIC office, the majority of referrals to the DHHS program are from the qualified WIC clients.

#### Attrition

Thirteen percent of TNFP clients left the program before the end of their pregnancy (see Table 5). These findings were slightly less than NFP clients nationally, where 15 percent of clients left the program before the end of their pregnancy. The Tarrant County program had the highest levels of attrition (21 percent) and the Houston DHHS program had the lowest levels of attrition (six percent).

**Table 5. Program Attrition During Pregnancy** 

	Number Enrolled	Percent Attrition During Pregnancy
Any Baby Can	258	16.3%
Parkland HHS	212	9.9%
Dallas YWCA	248	7.7%
Tarrant County	318	20.8%
Baylor	137	16.1%
Houston DHHS	123	5.7%
Texas Children's Health Plan	121	9.1%
Texas Tech	228	6.6%
Port Arthur	129	16.3%
The Children's Shelter	267	11.2%
University Health System	245	13.9%
TNFP	2,286	12.6%
National NFP	113,533	14.5%
NFP Objective		10% or less

Time period: September 1, 2008 - June 30, 2010

#### **Sources of Referrals to the TNFP Programs**

Between September 1, 2008, and June 30, 2010, the TNFP sites received 5,509 referrals from community and public assistance programs, health-care providers, schools, and other human service programs (see Table 6). Thirty-six percent of these referrals enrolled in the TNFP program. The University Health System program received the fewest (215 referrals) and the Dallas YWCA program received the most (1,087 referrals). The Any Baby Can program had the highest enrollment rate with 64 percent and the Dallas YWCA program had the lowest enrollment rate with 20 percent.

The majority of referrals to the TNFP program came from health-care providers with 32 percent, followed by schools at 16 percent, and WIC programs at 15 percent. Several TNFP programs had referral rates that differed greatly from both the TNFP averages and the NFP national averages (see Table 6). The greatest number of referrals to the Baylor, Texas Tech, and University Health System programs came from health-care providers or clinics with 65 percent for the Baylor program, 62 percent for the Texas Tech program, and 54 percent for University Health System. Overwhelmingly, the Houston DHHS program received most of its referrals or 79 percent from WIC clinics. Any Baby Can and The Children's Shelter received most of their referrals (around 40 percent) from schools. Finally, the Texas Children's Health Plan program received the majority of its referrals (49 percent) from Medicaid. 15

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<sup>&</sup>lt;sup>14</sup> The Houston DHHS TNFP program offices are in the Acres Home Multi Service Center, which also includes a WIC office. Through collaboration with the WIC office, the TNFP program has enrolled many of the qualified WIC clients.

<sup>&</sup>lt;sup>15</sup> Texas Children's Health Plan is a Medicaid managed care provider for Star Health. Texas Children's Health Plan TNFP staff contacted potential clients based on information obtained from Medicaid eligibility data. Therefore, all Texas Children's Health Plan TNFP clients were health plan members at TNFP enrollment.

**Table 6. Sources of Referrals to the NFP Program** 

**Referral Enrolled by Source** 

	Total Referrals	Percent Enrolled	WIC	Pregnancy Testing Clinic	Health Care Provider/ Clinic	School	Current Client	Other Home Visiting Program	Medicaid	Other (other human services program)
Any Baby Can	357	63.6%	4.0%	5.3%	10.6%	42.3%	1.8%	0.9%	0.0%	35.2%
Parkland HHS	763	25.8%	9.1%	3.6%	45.2%	31.5%	1.0%	4.6%	0.0%	5.1%
Dallas YWCA	1,087	20.1%	18.7%	13.7%	34.2%	5.9%	4.6%	5.9%	10.0%	6.8%
Tarrant County	656	45.7%	27.3%	13.0%	15.7%	3.3%	4.3%	2.3%	7.0%	27.0%
Baylor	381	34.1%	4.6%	3.8%	65.4%	7.7%	1.5%	4.6%	0.0%	12.3%
Houston DHHS	351	34.2%	79.2%	0.8%	5.0%	0.0%	4.2%	4.2%	0.0%	6.7%
Texas Children's Health Plan	268	45.1%	0.0%	0.0%	18.2%	0.8%	0.0%	0.8%	48.8%	31.4%
Texas Tech	518	43.6%	0.4%	7.5%	61.5%	4.9%	0.9%	0.9%	0.4%	23.5%
Port Arthur	274	45.6%	34.4%	9.6%	38.4%	5.6%	4.0%	0.0%	0.0%	8.0%
The Children's Shelter	639	40.7%	0.0%	6.5%	25.8%	38.1%	1.9%	0.4%	0.0%	27.3%
University Health System	215	29.3%	9.5%	1.6%	54.0%	3.2%	1.6%	0.0%	6.3%	23.8%
TNFP	5,509	36.1%	15.1%	7.1%	32.0%	15.6%	2.5%	2.3%	5.4%	20.0%
National NFP*	139,144	30.6%	16.1%	14.1%	31.3%	6.5%	3.5%	3.9%	2.8%	21.8%

Time period: September 1, 2008 - June 30, 2010

<sup>\*</sup> All national NFP data were based on cumulative data from October 1, 2006 (when NFP introduced new data collection forms) through June 30, 2010.

#### Adherence to NFP Model Standards

HHSC adopted the NFPNSO performance indicators designed to measure each grantee's performance in terms of the NFP model standards. These performance indicators were implemented as 18 NFP model "standards" that cover seven areas of implementation. By following the model standards, results of the intervention are expected to be similar to the results of the randomized control trials conducted by the NFPNSO. This report assesses adherence to NFP program model standards from September 1, 2008 through June 30, 2010. <sup>16</sup> See Appendix B for additional information on each program site's compliance with NFP model standards.

#### Clients

**Standard 1.** Client participation must be voluntary. NFP services are designed to build self-efficacy. Voluntary enrollment empowers the client and promotes a trusting relationship between the client and the nurse home visitor.

The TNFP program has implemented several protocols to ensure adherence to Standard 1.

- All clients were required to sign a consent form before participation. The TNFP program does not consider a client enrolled until she has a signed consent form.
- The consent form included in the enrollment packet includes explicit language indicating that participation is voluntary.
- If a potential client was a minor, the nurse was required to spend time explaining the program to both the potential client and her guardian. The minor must express interest in the program and her desire to participate, but the guardian must sign the consent form.
- When recruiting potential partner agencies, TNFP staff is required to ensure that the partner agency understands that client involvement must be voluntary. For example, if a TNFP site would like to partner with a local probation office it is required to explain to probation staff that participation in the TNFP program cannot be a condition of parole.

If the TNFP sites had enrollment issues or concerns, NFPNSO and HHSC staff were available to provide guidance and possible solutions.

**Standard 2.** Client is a first-time mother. The intention of the NFP program is to help women when they are vulnerable and more open to receiving additional support. NFPNSO research suggests that first-time mothers may benefit from the NFP program more than those with additional children, possibly because inexperience increases receptiveness to offers of help. The NFPNSO data indicate that limiting enrollment to first-time mothers maximizes the opportunity to improve outcomes for families.

In order to ensure adherence to Standard 2, each TNFP program site asked all potential clients to provide a pregnancy history and confirm that they had no prior live births. Only those who meet this criterion were enrolled in the program. Since the implementation of the 11 program sites, eleven mothers have been enrolled who were not first time mothers. Between September 1, 2008

<sup>&</sup>lt;sup>16</sup> Data included in this report ended on June 30, 2010, due to a lag in the availability of program data.

and June 30, 2009 one client in each of the programs at Any Baby Can, Tarrant County, Houston DHHS, and University Health Systems were not first time mothers. In the same period, seven clients in the Texas Tech program were not first time mothers. In the second year of the program (July 1, 2009 - June 30, 2010) every new client enrolled in the TNFP program was a first time mother.

**Standard 3.** Client meets low-income criteria at intake. At the time of enrollment, each NFP client is required to have an income at or below 185 percent of the federal poverty level. The NFPNSO randomized control trials found that, while all clients benefited from the assistance provided by the NFP program, clients with higher incomes had additional resources available to them outside of the program and did not benefit from the program to the same degree as low-income clients.

Each TNFP program site asked all potential clients to disclose their income for verification. Each site also obtained eligibility information by determining whether the potential client was receiving Medicaid, WIC funds, or SNAP benefits. A potential client was considered eligible for enrollment if she was receiving public benefits that have an income requirement at or below 185 percent of the federal poverty level, including Medicaid, WIC, and SNAP.<sup>17</sup>

**Standard 4.** Client is enrolled in the program early in her pregnancy and receives her first home visit by no later than the end of the 28<sup>th</sup> week of pregnancy. Early enrollment allows time for the client and nurse home visitor to establish a relationship before the birth of the child. NFPNSO research indicates that early enrollment provides the nurse home visitor the opportunity to address prenatal health behaviors that affect birth outcomes and the child's neurodevelopment.

Ninety-six percent of TNFP clients were enrolled before the end of the 28th week of gestation. This percentage is similar to the NFP program national average of 94 percent. TNFP site percentages ranged from 92 percent in the Port Arthur program to almost 100 percent in the Texas Tech program (see Appendix B, Table B-1).

#### Intervention Context

**Standard 5.** Client is visited one-to-one, one nurse home visitor to one first-time mother. The therapeutic relationship between the nurse home visitor and the client must be focused on the individual client's circumstances. By engaging in a one-to-one setting, the nurse home visitor can better strengthen the client's abilities and behavior change to achieve the goals of the program. The client may choose to have other supporting family members in attendance during scheduled visits. In particular, husbands or partners are encouraged to be part of visits when possible.

<sup>&</sup>lt;sup>17</sup> When determining eligibility for the NFP program, NFPNSO indicated that most implementing agencies across the nation use the income eligibility thresholds for WIC, Medicaid, or other public program for low-income families. <sup>18</sup> At enrollment, each client estimated how long she had been pregnant. After enrollment, sonograms indicated some clients exceeded the 28-week requirement. These clients typically remained enrolled in the program. Also early in program implementation, some sites mistakenly believed that a gestation period of less than 29 weeks met the 28-week requirement. Through further discussion with NFPNSO, HHSC clarified that the gestational period must be no greater than 28 weeks and six days.

The TNFP program closely followed the NFPNSO guidelines pertaining to home visits. Specifically, each nurse home visitor scheduled individual visits with each client. In addition, each TNFP program site is required to ensure an adequate nurse-home-visitor-to-client ratio. On average, each TNFP nurse home visitor had a 22-client caseload.

During pregnancy, 15 percent of all visits with TNFP clients included the client's husband or partner, and 13 percent included the client's mother. Similarly, during infancy, 15 percent of all visits included the client's partner or husband and 11 percent included the client's mother. Overall, the TNFP program had greater involvement by family in the visits than the NFP national average, where between 11 and 13 percent of NFP visits included the client's husband or partner and 9 percent included the client's mother. Programs with the greatest partner involvement included Houston DHHS, Texas Tech, Port Arthur, and University Health System. Over 19 percent of visits during pregnancy at the Parkland HHS, Texas Children's Health Plan, Texas Tech, and The Children's Shelter programs included the client's mother (see Appendix B, Table B-2).

**Standard 6.** The program is delivered in the client's home, which is defined as the place where she is currently residing. Home visitation is an essential part of the program. When a client is visited in her home, the nurse home visitor has an opportunity to observe, assess, understand, and monitor the client's status. Specifically, the nurse can assess the client's safety, social dynamics, ability to provide basic needs, and the mother-child interaction. NFPNSO defines a "home setting" as a location where the client lives for the majority of time (i.e., she sleeps there at least four nights a week). This may include a shelter, a friend's home, a detention center, or another location. There are times when the client's living situation or her work/school schedule makes it difficult to see the client at home, and the visit is conducted in another setting.

Eighty-six percent of TNFP home visits took place in the client's home. Eight percent took place in the home of a friend or family member. The other six percent of visits took place at school, a doctor's office, the client's place of employment, or another location. The location of home visits was relatively consistent across TNFP sites with a few exceptions (see Appendix B, Table B-3). When compared to the averages across all TNFP sites the:

- Tarrant County and University Health System programs had the highest proportion of visits that took place in the home of a friend or family member.
- Any Baby Can program had the highest proportion of visits that took place at the client's school.

**Standard 7.** Client is visited throughout her pregnancy and the first two years of her child's life in accordance with the current NFPNSO Guidelines. The frequency of home visits may influence the effectiveness of NFP programs. Even if clients do not use the nurse home visitor to the maximum level recommended, the visits made can be a powerful tool for change. Research indicates that the earlier a client enters the program, the greater the program's effectiveness. The high frequency of home visits early in the pregnancy and throughout the first two years of the child's life may have the greatest impact on maternal behavior and thereby the highest probability of improving outcomes. For example, substance abuse, smoking, and nutrition greatly influence fetal development. By addressing these issues early with the client, the risks for adverse outcomes for mother and baby can be reduced.

Overall, TNFP sites completed 73 percent of the expected home visits during pregnancy based on the NFPNSO Guidelines. This completion rate is equal to the NFP national average of 73 percent. The NFPNSO objective is an 80 percent completion rate during the pregnancy phase. The Children's Shelter and Texas Tech programs had the highest completion rates, with over 80 percent of all expected client visits completed. The percentage of expected home visits completed in infancy (41 percent) was also similar to the NFP national average of 39 percent.

# **Expectations of Nurses and Supervisors**

**Standard 8.** Nurse home visitors and nursing supervisors are registered professional nurses with a minimum of a baccalaureate degree in nursing. The NFPNSO research indicates that the public perceives registered nurses as having high standards of ethical practice and honesty. This may give NFP nurses credibility with families, helping make them acceptable providers of the NFPNSO curriculum and welcomed into clients' homes. The nurse home visitors are also required to have a valid nursing license.

As of June 30, 2010, 67 of the 69 nurse home visitors currently seeing clients had a Bachelors of Nursing (BSN) degree. With HHSC's support, two sites submitted a *Variance to Model Standard 8 Request* to NFPNSO for the two nurses who did not have a BSN. NFPNSO approved these variances. All eleven nursing supervisors had a BSN. In addition, four of the nursing supervisors had master's degrees in nursing, public health, or business administration.

**Standard 9.** Nurse home visitors and nursing supervisors complete core educational sessions required by NFPNSO and deliver the intervention with fidelity to the NFP Model. The NFP program is a highly specialized program that requires extensive training on the NFP model, theories, and structure to deliver the program. The NFPNSO policy is that all nursing staff must complete all NFP education sessions. While NFPNSO does not have a specific timeframe for the completion of all the training sessions, nurse home visitors are required to complete the first two of four NFPNSO training sessions prior to visiting clients.

As of June 30, 2010, all TNFP nurse home visitors had completed the first two NFPNSO training sessions. In addition, the nurse home visitors are expected to complete ten other training sessions relevant to the NFP program including:

- instruction on observation skills,
- child health and development,
- care giving,

• care giving

- infant cues and behaviors,
- feeding scale training,
- Texas Health Steps modules,
- the OAG Paternity Opportunity Program, and
- identification of complications during pregnancy.

<sup>&</sup>lt;sup>19</sup> One nurse home visitor from Any Baby Can had a Bachelors degree in a field other than nursing but was an RN and one bilingual (English/Spanish) nurse home visitor in the Parkland HHS program was an RN with an Associates degree in nursing and was enrolled in a BSN program.

As of June 30, 2010, over 85 percent of all TNFP nurse home visitors had completed all required additional training sessions. The remaining nurses were in the appropriate phases of their training based on hire dates. In addition, HHSC provided other training opportunities to staff to complement and enhance training received from NFPNSO. Training needs are identified through ongoing needs assessments conducted by the TNFP State Nurse Consultant.

#### Application of the Intervention

**Standard 10.** Nurse home visitors, using professional knowledge, judgment and skill, apply NFPNSO Visitation Guidelines focusing the topic of each visit to the strengths and challenges of each family and apportioning time across defined program domains. NFPNSO visitation guidelines are tools that guide nurse home visitors in the delivery of program content. These guidelines suggest that each visit include information about each of the following six life domains.

- **Personal Health** Health maintenance practices, nutrition and exercise, substance use, and mental health.
- Environmental Health Home, work, school, and neighborhood.
- **Life Course Development** Family planning, education, and livelihood.
- Maternal Role Mothering role, physical, behavioral, and emotional care of a child.
- Friends and Family Personal network relationships and assistance with childcare.
- Health and Human Services Linking families with needed referrals and services.

The NFPNSO provides objectives for the overall proportion of time at each home visit devoted to the first five of the six life domains. In accordance with NFPNSO policies, the TNFP nurse home visitors individualize visit content to meet the client's needs rather than adhering to a predetermined schedule. During the client's pregnancy, the TNFP nurse home visitors met or exceeded the NFPNSO objectives for the proportion of home visit time devoted to four of the five domains. The exception was the Maternal Role domain. During the six weeks after the client's baby was delivered, the TNFP nurse home visitors spent the most time during their home visit time on the Personal Health and the Maternal Role domains (see Appendix B, B-4). As with the pregnancy phase, during the infancy phase the TNFP nurse home visitors met or exceeded the NFPNSO objectives for the proportion of home visits devoted to four of the five domains (see Appendix B, B-5 and B-6). TNFP nurse home visitors spent less time on the Maternal Role when compared to the national NFPNSO guidelines. In addition, the nurse home visitors from the Baylor program spent less time on Personal Health and more time on Life Course Development when compared to the other TNFP program sites.

It is important to keep in mind that these are proportions across all home visits for all nurse home visitors. In addition, the proportions need to add up to 100 percent. For example, if a nurse home visitor spent additional time on Personal Health, the proportion of home visit time spent on the other domains would decrease even if the nurse home visitor did an excellent job of presenting all of the information for all of the other domains. It is difficult to use this information other than

 $^{20}$  Health and Human Services is addressed in the "Referrals to Public Programs" section of the process evaluation.

noting if a domain was consistently either extremely low or extremely high. Neither was true during the reporting period.

**Standard 11.** Nurse home visitors apply the theoretical framework that underpins the program, emphasizing self-efficacy, human ecology and attachment theories, through current clinical methods. These theories serve as the foundation for NFP programs and are reflected in the visit guidelines and training sessions. Nurse home visitors are expected to utilize these guidelines and methods in each home visit.

TNFP nursing supervisors and nurse home visitors, NFPNSO, and HHSC work together to ensure that each TNFP program site closely follows the NFP model. Questions or concerns about model fidelity are addressed through an open dialogue between the TNFP sites, HHSC, and NFPNSO. In addition, each TNFP nursing supervisor evaluates the nurse home visitors to ensure fidelity to the NFP model.

**Standard 12.** A full time nurse home visitor carries a caseload of no more than 25 active clients. A caseload greater than 25 clients would negatively impact the nurse home visitor's ability to develop and establish an adequate therapeutic relationship with each client.

Average caseload size for the TNFP sites range from 18 clients at Parkland HHS to 24 clients at Texas Tech per nurse home visitor. On average, each TNFP nurse home visitor has a 22-client caseload. Three nurses at Any Baby Can, two nurses at University Health System, and one nurse at both Port Arthur and The Children's Shelter temporarily exceeded the 25 client caseload maximum. Nurse Home visitors may temporarily exceed the maximum caseload to provide services to clients whose nurse home visitor was temporarily absent or permanently left the program. Reasons for exceeding the maximum caseload size included temporary nursing staff vacancies (Any Baby Can) and newly hired nurses that had not assumed a full caseload (University Health System, The Children's Shelter, and Port Arthur).

#### Reflection and Clinical Supervision

**Standard 13.** A full-time nursing supervisor provides supervision to no more than eight individual nurse home visitors. Because of the expectation of one-to-one supervision, a full-time nursing supervisor should manage no more than eight nurse home visitors. Nursing supervisors are also responsible for referral management, program development, and administrative tasks that include the management of administrative, clerical, and interpreter staff. Sites have complied with this standard.

**Standard 14.** Nursing supervisors provide nurse home visitors clinical supervision with reflection, demonstrate integration of the theories, and facilitate professional development essential to the nurse home visitor role through specific supervisory activities including one-to-one clinical supervision, case conferences, team meetings and field supervision. To ensure that nurse home visitors are clinically competent and supported to implement the NFP program, nursing supervisors provide clinical reflection through specific supervisory activities. These activities include one-to-one supervision, case conferences and team meetings, and field supervision.

- One-to-one supervision. Nursing supervisors are required to have a weekly one-to-one meeting with each nurse home visitor to reflect on the nurse's work, including the management of her caseload and quality assurance.
  - •• On average, nursing supervisors met with their nurses three times per month. Texas Children's Health Plan and The Children's Shelter had the greatest frequency of meetings with an average of 3.6 visits per nurse each month. In comparison, the Parkland HHS program nursing supervisor met with each of their nurse home visitors on average 1.9 times per month (see Appendix B, B-7). While overall, the TNFP program successfully met this criteria for Standard 14, two programs (Parkland HHS and Tarrant County) failed to meet the NFPNSO minimum threshold of three one-to-one visits per nurse each month.
- Case conferences and team meetings. Nursing supervisors are required to schedule weekly case conferences or team meetings dedicated to joint case review for the purpose of problem solving and professional growth. Team meetings also include discussions of program implementation issues and team building exercises.
  - •• On average, the 11 TNFP sites held case conferences and team meetings four times per month. The average number of visits per month ranged from 3.6 at the Tarrant County program to 6.2 at the Port Arthur program (see Appendix B, B-7). All TNFP program sites met the NFPNSO minimum threshold requirement of 3.4 case conferences and team meetings per month.
- **Field supervision.** Nursing supervisors are required to conduct a joint home visit with each nurse every four months.
  - •• On average, the nursing supervisors from four sites—Parkland HHS, Baylor, Houston DHHS, and Texas Tech—accompanied each of their nurse home visitors on a home visit every four months. Nursing supervisors from the remaining 7 sites—Any Baby Can, Dallas YWCA, Tarrant County, Texas Children's Health Plan, Port Arthur, The Children's Shelter, and University Health System—conducted home visits every four months with at least 50 percent of their nurse home visitors eligible during the reporting period. These seven sites partially met the field supervision portion of Standard 14 (See Appendix B, B-7).

#### Program Monitoring and Use of Data

**Standard 15.** Nurse home visitor and nursing supervisors collect data as specified by the NFPNSO and use NFP Reports to guide their practice, assess and guide program implementation, inform clinical supervision, enhance program quality, and demonstrate program fidelity.

Each TNFP program site collected data and used the NFP reports to monitor and improve its operations. The NFPNSO sent each site a quality control report every month indicating any problems with the data collected and transmitted to NFPNSO. TNFP nursing supervisors

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<sup>&</sup>lt;sup>21</sup> NFPNSO guidelines recommend an 85 percent threshold for conducting weekly case conferences and team meetings. All TNFP program sites exceeded this threshold.

reviewed these reports to determine the source of the errors (e.g., data entry, data collection, or other error). The TNFP program site made appropriate corrections in the database or adjustments in protocol (in consultation with NFPNSO or HHSC, if needed).

#### Agency

**Standard 16.** An NFP implementing agency is located in and operated by an organization known in the community for being a successful provider of prevention services to low-income families. The implementing agency should provide visible leadership and support the NFP program with all tools necessary to ensure program fidelity.

The TNFP program sites are described below and each site met the criteria of standard 16.

- Any Baby Can, Inc. has a 30-year history of providing preventive home-based programs for expectant, first-time parents with multiple risk factors including poverty, lack of health insurance or access to health care, limited education or job skills, parental disability, mental health concerns, history of family violence, and a history of substance abuse. The primary goals of Any Baby Can include improved birth outcomes, improved parenting behaviors, the reduction of childhood injuries, and increased immunization rates.
- Parkland Health and Hospital System (HHS) is an established local government organization with a reputation for being a successful provider of services to low-income families in Dallas County. Parkland HHS has several programs designed to help low-income families obtain health care, including Dallas Healthy Start, the March of Dimes, and Youth Angle Family Access Network.
- YWCA of Metropolitan Dallas has been active in the Dallas community since 1908 and has a history of developing and sustaining programs to meet the needs of low-income families. The YWCA offers a continuum of services that help improve women's lives and remove barriers to self-sufficiency. Annually, the YWCA serves more than 6,000 low-to-moderate income families through subsidized childcare centers, financial education development, and parental education and support.
- Tarrant County Health Department has a strong foundation in the community and provides a broad array of public health services to prevent disease and injury and to promote health. Through collaborations with community, church and governmental agencies, Tarrant County has worked to address many local health issues affecting low-income families.
- Baylor College of Medicine Teen Health Clinics has been providing medical, counseling, and education services for 35 years in some of Houston's poorest neighborhoods. Through seven comprehensive teen health clinics, the Baylor College of Medicine provides community oriented primary and reproductive care to low-income women under 21 years of age. The primary goals of the teen health clinics are to reduce infant mortality, prevent subsequent teen pregnancies, and reduce the incidence of sexually transmitted diseases.
- City of Houston Department of Health and Human Services (DHHS) has a long history of assisting at-risk families in the Houston Metropolitan Area. Houston DHHS has historically administered two programs focused on assisting low-income pregnant women: the Targeted Case Management for Children and Pregnant Women program and the Health Families Healthy Futures home visitation program.

- Texas Children's Health Plan is the largest combined STAR/Children's Health Insurance Program (CHIP) managed care organization in Harris County. The Texas Children's Health Plan has a maternity management-newborn program, Star Babies, for pregnant Medicaid clients in the Texas Children's Health Plan population. This program provides education and resource assistance to a monthly average of 2,500 pregnant women and their babies. The program includes a home visitation program for high-risk mothers, community outreach, carseat installation services, and other social services.
- Texas Tech University Health Science Center was established in 1998 in a medically underserved area of Lubbock to provide primary care services to at-risk families. Texas Tech has several programs designed to provide services to low-income families, including Texas Health Steps, primary care clinics, counseling services, and women's health services.
- City of Port Arthur Health Department has more than 100 years of experience providing health, parent, and family support services to low-income families in their community. Port Arthur has past experience in providing home-based services through a maternal and child health grant.
- The Children's Shelter has been providing for the health and safety of children in crisis in the San Antonio community since 1901. The Children's Shelter offers medical and dental services; foster care and adoption services; mental health services; outreach programs; and services for pregnant and parenting teens. Through the Mothers and Schools program, The Children's Shelter has collaborated with the San Antonio Independent School District to reduce pregnancy, poverty, high school dropout, and child abuse rates.
- University Health System is a publicly supported, academic medical center and safety net provider serving San Antonio and the South Texas region. Historically, University Health System has been the major service provider for low-income families in providing maternal and child health care in Bexar County. University Health System has worked for more than 50 years to improve the outcomes for low-income women and children.

**Standard 17.** An NFP implementing agency convenes a long-term Community Advisory Board that meets at least quarterly to promote a community support system to the program and to promote program quality and sustainability. It is important for an implementing agency to have a community advisory board where implementation issues can be vetted and problems addressed. A community advisory board:

- provides a support network for NFP staff and clients;
- facilitates awareness of NFP in the community;
- provides assistance in developing relationships with referral sources and service providers;
- helps assess and respond to challenges in program implementation;
- identifies gaps in client resources and services;
- consults with the NFP staff regarding quality improvement; and
- works with other local, state, and federal entities to generate the support needed to sustain the NFP program.

Each program site has a community advisory board that met quarterly. The two TNFP sites in Dallas share an advisory board, as do the two TNFP sites in San Antonio.

**Standard 18.** Adequate support and structure shall be in place to support nurse home visitors and nursing supervisors to implement the program and to ensure that data are accurately entered into the data base in a timely manner. Support includes the necessary infrastructure to support and implement the program. This includes the necessary physical space, desks, computers, cell phones, filing cabinets, and other equipment to carry out the program. It also includes employing a person primarily responsible for key administrative support tasks for NFP staff, such as entering data and maintaining report accuracy. Each implementing agency must have the equivalent of a half-time general administrative staff member for every 100 clients to support the nurse home visitors and nursing supervisors.

All 11 TNFP sites have established an adequate support structure to ensure effective implementation and accurate data entry. Each TNFP program site has dedicated support staff. Ten sites have one full-time person providing data entry and other administrative assistance. One site had two half-time persons filling those roles but redistributed the work to one full-time person, and one site has one half-time person filling that role.

In addition, each implementing agency has dedicated space, desks, computers, and other equipment to its TNFP program. The majority of each site's overhead is paid by the implementing agency.

#### **Referrals to Public Programs**

Between September 1, 2008 and June 30, 2010, the TNFP program sites made 5,288 referrals to public programs. Of those, 36 percent were for WIC services, 31 percent for Medicaid, and 13 percent for SNAP (see Table 7). Some sites had referral patterns that were markedly different from most of the other sites. For example, only 6 percent of all TNFP clients were referred for TANF services, but 27 percent of University Health System clients were referred for TANF services. Thirteen percent of all TNFP clients were referred for SNAP, but 28 percent of Texas Tech clients were referred for SNAP. Finally, 17 percent of clients from The Children's Shelter and 16 percent of clients from the Houston DHHS programs were referred for Children's Medicaid services, but only 10 percent of all TNFP clients were referred for Children's Medicaid services.

**Table 7. Referrals to Public Programs** 

#### **Government Assistance**

	TANF	Medicaid Client	Medicaid Child	SNAP	Social Security	Unemploy - ment	SCHIP	WIC
Any Baby Can	10.4%	21.2%	6.2%	12.4%	0.3%	0.7%	2.3%	46.6%
Parkland HHS	2.2%	32.8%	6.0%	5.8%	0.9%	0.2%	2.4%	49.8%
Dallas YWCA*	9.3%	26.6%	8.1%	19.4%	0.8%	0.8%	1.6%	33.5%
Tarrant County *	6.6%	31.0%	3.8%	17.6%	0.3%	1.1%	0.3%	39.3%
Baylor	3.4%	42.5%	6.3%	8.5%	0.2%	0.0%	0.2%	38.9%
Houston DHHS*	8.4%	17.2%	15.7%	28.0%	3.2%	3.2%	2.0%	22.4%
Texas Children's Health Plan	10.6%	36.5%	3.5%	22.0%	2.0%	0.0%	0.4%	25.1%
Texas Tech	8.6%	33.2%	4.4%	20.9%	1.0%	0.3%	0.5%	31.1%
Port Arthur	3.3%	29.4%	1.9%	21.0%	1.9%	0.0%	0.5%	42.1%
The Children's Shelter	3.5%	32.7%	16.6%	6.9%	0.1%	0.1%	4.1%	36.0%
University Health System	27.3%	20.5%	3.8%	15.9%	0.8%	0.0%	0.8%	31.1%
TNFP	5.9%	31.1%	10.3%	12.8%	0.7%	0.5%	2.3%	36.4%

Time period: September 1, 2008 - June 30, 2010

<sup>22</sup> There were also referrals to other programs for crisis intervention, mental health, substance abuse, health care services, education and other services. The frequencies of these referrals were relatively low.

<sup>\*</sup> Percentages for Houston DHHS, Tarrant County, and Dallas YWCA are based on 2009 and 2010 data only.

# **Establishment of Paternity**

As a Texas legislature mandated goal of the program, TNFP program sites must assist clients in establishing paternity of their babies. Information on paternity establishment was provided to 100 percent of TNFP clients between September 1, 2009 and June 30, 2010. During this time period, 213 TNFP clients report that they had completed Acknowledgment of Paternity (AOP) documentation (see Table 8). It is unknown how many clients submitted AOP documentation during their hospital stay following the birth of their baby or at a later time point.

**Table 8. Establishment of Paternity** 

Number of Clients who Completed Acknowledgment of Paternity Documentation\*

	r atermity Documentation.
Any Baby Can	25
Parkland HHS	19
Dallas YWCA	20
Tarrant County	25
Baylor	7
Houston DHHS	11
Texas Children's Health Plan	6
Texas Tech	51
Port Arthur	19
The Children's Shelter	5
University Health System	25
TNFP	213

Time period: July 1, 2009 - June 30, 2010

<sup>\*</sup> Only clients who submit AOP documentation before the birth of their babies are included.

#### **Program Outcomes**

Program outcomes are associated with the four program goals:

- improve pregnancy outcomes,
- improve child health and development,
- improve family economic self-sufficiency and stability, and
- reduce the incidence of child abuse and neglect.

#### **Improve Pregnancy Outcomes**

Between September 1, 2008 and June 30, 2010, there were 1,332 babies born to TNFP clients. Of these, 11 percent were born before 37 weeks gestation (see Table 9). In the same period, ten percent of TNFP babies were low birth weight (weighing less than 2,500 grams or 5 lbs. 8 oz.) and two percent were very low birth weight (weighing less than 1,500 grams or 3 lbs. 5 oz.). Sixteen percent of TNFP babies were admitted to the Neonatal Intensive Care Unit (NICU). These averages were similar to the NFP national averages but higher than the NFP national and Healthy People 2010 objectives. <sup>23,24</sup>

Table 9. Goal 1 – Improve Pregnancy Outcomes

	Number of Births	Preterm Birth (born before 37 weeks)	Low Birth Weight (< 2500g)	Very Low Birth Weight (< 1500g)	Admitted to the NICU
TNFP	1,332	10.9%	9.8%	2.0%	16.0%
National NFP	76,271	9.7%	9.4%	2.0%	14.0%
Healthy People 2010 Objective*		7.6%	5.0%	0.9%	n/a

Time period: September 1, 2009 - June 30, 2010

\* The NFP objectives are the same as the Healthy People 2010 objectives.

<sup>23</sup> www.healthypeople.gov. Reduce low birth weight (LBW) and very low birth weight (VLBW). Chapter 16-10. Last accessed September 16, 2010.

<sup>&</sup>lt;sup>24</sup> www.healthypeople.gov. Reduce preterm birth. Chapter 16-11. Last accessed September 16, 2010.

#### **Improve Child Health and Development**

## **Breastfeeding**

Between September 1, 2008 and June 30, 2010, 85 percent of TNFP clients with babies (1,363 clients) initiated breastfeeding after the birth of their babies (see Table 10). Seventeen percent of the 473 clients with babies at least six months of age were still breastfeeding when their baby was six months old. Finally, of the 66 clients with babies 12 months or older, three percent were still breastfeeding when their baby was 12 months old. The percent of TNFP clients who initiated breastfeeding was higher than the NFP national average and the Healthy People 2010 objective. However, the percent of TNFP clients who were still breastfeeding at 6-months and 12-months was much lower than both the NFP national average and the Healthy People 2010 objective.

Table 10. Goal 2 – Improve Child Health and Development Frequency of Breastfeeding

	Initiating Br	eastfeeding	Breastfeedi Mont	O	Breastfeeding at 12 Months		
	Number of Clients	Percent	Number of Clients at 6- months	Percent	Number of Clients at 12-months	Percent	
TNFP	1,159	85.0%	80	17.0%	14	3.0%	
National NFP	n/a	77.0%	n/a	27.0%	n/a	16.0%	
Healthy People 2010 Objective		75.0%		50.0%		25.0%	

Time period: September 1, 2008 - June 30, 2010

#### **Immunizations**

Between September 1, 2008 and June 30, 2010, 86 percent of 6-month-old TNFP babies had received all of their scheduled immunizations, and 82 percent of 12-month-old TNFP babies had received all of their scheduled immunizations (see Appendix C, C-1). These figures are very similar to the NFP national averages of 86 percent at 6-months and 85 percent at 12-months. The Healthy People 2010 objective is 90 percent. <sup>26</sup>

<sup>&</sup>lt;sup>25</sup> www.healthypeople.gov. Increase the proportion of mothers who breastfeed their babies. Chapter 16-19. Last accessed September 16, 2010.

www.healthypeople.gov. Achieve and maintain effective vaccination coverage levels for universally recommended vaccines among young children. Chapter 14-22. Last accessed September 16, 2010.

#### Lead Exposure

Between September 1, 2008 and June 30, 2010, 10 percent of 6-month-old TNFP babies had been screened for lead exposure, and 32 percent of 12-month-old TNFP babies had been screened for lead exposure (see Appendix C, C-2). None of the TNFP tests were positive for lead exposure. The Healthy People 2010 objective is zero percent. The percent of the babies of TNFP clients screened for lead exposure was higher than the NFP national averages at both 6-months and 12-months.

#### **Developmental Delays**

In order to screen TNFP babies for developmental and social delays, nurse home visitors administer the Ages and Stages Questionnaire (ASQ-3) and the Ages and Stages Questionnaire: Social-Emotional (ASQ:SE). These screening instruments are designed to test infants and young children at standardized intervals for developmental delays and social-emotional delays. Only data from the first screening assessment (4-months for the ASQ-3 and 6- months for the ASQ:SE) are reported. Overall, 476 (81 percent) of TNFP babies received the ASQ-3 at 4-months and 488 (85 percent) received the ASQ:SE at 6-months. Of these TNFP babies, 11 percent required additional developmental assessments and nine percent required additional social-emotional assessments (see Appendix C, C-3). The percent of TNFP babies requiring additional developmental assessments was equal to the NFP national average, but the percentage of TNFP babies who required additional social-emotional assessments was seven percent higher than the NFP national average of four percent.

#### **Improve Family Economic Self-Sufficiency and Stability**

#### Subsequent Birth

Between September 1, 2008 and June 30, 2010, four percent of TNFP clients were pregnant 6 months after giving birth and 15 percent were pregnant 12 months after giving birth (see Table 11). The percent of TNFP clients pregnant after six months was equal to the NFP national average. However, the percent of TNFP clients pregnant at 12 months was higher than the NFP national average (13 percent).

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www.healthypeople.gov. Eliminate elevated blood lead levels in children. Chapter 8-11. Last accessed September 16, 2010.

Table 11. Goal 3 – Improve Family Economic Self-Sufficiency and Stability Subsequent Pregnancies

	6-Months	Postpartum	12-Months Postpartum			
	Total Number of Clients	Percent of Clients Pregnant	Total Number of Clients	Percent of Clients Pregnant		
TNFP	614	3.6%	87	14.9%		
National NFP	48,280	3.8%	35,065	12.6%		

#### Substance Use

Between September 1, 2008 and June 30, 2010, substance abuse among TNFP clients was infrequently reported. At intake, 58 clients smoked cigarettes, nine used marijuana, 11 drank alcohol regularly, one used cocaine, and two used other illicit drugs (see Appendix C, C-4). At 36-weeks gestation, there was a reduction in the use of all substances except alcohol. Sixteen clients had stopped smoking, two clients had stopped using marijuana, and three clients had stopped using cocaine or other drugs. One new client reported drinking alcohol at 36-weeks gestation. With the exception of alcohol consumption, these reductions were greater than the NFP national averages. The Healthy People 2010 objective for abstinence during pregnancy from cigarettes is 99 percent, 100 percent for illicit drugs, and 94 percent for alcohol. 28

### Domestic Violence

Of the TNFP clients enrolled between September 1, 2008 and June 30, 2010, 87 indicated they were victims of physical abuse from their partners and 62 indicated they feared their partners (see Appendix C, C-5). Among clients at 36-weeks gestation, there was a 47 percent reduction in physical abuse and fear of partner. This reduction is comparable to the NFP national averages.

### Reduce the Incidence of Child Abuse and Neglect

NFPNSO assesses rates of child abuse and neglect by the number of TNFP children admitted to the hospital or seen in the emergency room because of an injury or ingestion. Between September 1, 2008 and June 30, 2010, 36 TNFP babies under 12-months of age were admitted to the hospital or seen in the emergency room because of injury or ingestion.

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<sup>&</sup>lt;sup>28</sup> www.healthypeople.gov. Increase abstinence from alcohol, cigarettes, and illicit drugs among pregnant women. Chapter 16-17. Last accessed September 16, 2010.

## **Summary**

The NFP program successfully implemented 11 TNFP sites across Texas, enrolling 2,286 low-income first-time mothers and has a current TNFP caseload of 1,488 low-income first time mothers. TNFP clients ranged in age from 11 to 42 years with an average age of 19. The majority of clients were Hispanic or African-American, unmarried, and not working.

As a condition of their funding, TNFP grantees were required to adhere to the TNFP program model standards developed by the NFPNSO. All TNFP sites successfully adhered to 17 of the 18 model standards covering seven areas of implementation.

- Clients (Standards 1-4) Each client participated in the program voluntarily, was a first-time mother, and met the low-income criteria. Ninety-six percent began receiving program services before their 29<sup>th</sup> week of pregnancy.
- **Intervention Context (Standards 5-7)** Each nurse home visitor visited clients in accordance with NFPNSO guidelines.
- Expectations of the Nurses and Supervisors (Standards 8-9) Each grantee followed the NFPNSO guidelines regarding staff training and experience.
- Application of the Intervention (Standards 10-12) Each nurse home visitor followed the NFPNSO visitation guidelines during client visits, used current clinical methods to apply the NFP theoretical framework, and with the exception of six nurse home visitors, did not have a caseload greater than 25 clients.
- Reflection and Clinical Supervision (Standards 13-14) Each nursing supervisor provided supervision to no more than eight nurses, and provided clinical supervision and feedback in accordance with NFPNSO guidelines. Overall, each nursing supervisor provided sufficient one-to-one supervision. Two exceptions were Parkland HHS and Tarrant County who failed to meet the minimum threshold required of the Standard 14. Four of the eleven sites conducted field supervision in accordance with one portion of the NFPNSO guidelines in Standard 14. With the exception of one site, the remaining seven sites completed at least 50 percent of the field supervision.
- **Program Monitoring and Use of Data (Standard 15)** Each grantee collected data in accordance with NFPNSO guidelines.
- Agency (Standards 16-18) Each grantee was located in an organization known for providing prevention services, and had the organizational structure to support the implementation and operation of an NFP program. All of the program met regularly with a community advisory board to discuss implementation issues.

## **Conclusion**

The focus of the S.B. 156 evaluation requirement is to examine the fidelity to the NFPNSO model. The TNFP grantees adhered to almost all of the NFP model standards. The small deviations observed in field supervision and one-to-one supervision are not expected to affect the outcomes of the TNFP intervention. Outcomes generally appear to be consistent with NFP national averages.

# **APPENDIX A: DEMOGRAPHICS**

Table A-1. Client Ages

	Number	Age	Age		Percent in Each Age Group				
	enrolled	(Mean)	Range	<15	15-17	18-19	20-24	25-29	>=30
Any Baby Can	258	18.5	13-42	5.0%	51.2%	19.4%	15.1%	5.0%	4.3%
Parkland HHS	212	18.6	12-38	9.0%	42.5%	19.8%	19.3%	7.1%	2.4%
Dallas YWCA	248	19.2	13-34	4.0%	25.0%	28.6%	34.3%	6.9%	1.2%
Tarrant County	318	20.0	11-40	3.8%	26.1%	24.8%	29.6%	11.3%	4.4%
Baylor	137	18.3	14-23	0.7%	40.1%	30.7%	28.5%	0.0%	0.0%
Houston DHHS	123	19.6	14-38	4.1%	26.8%	26.8%	32.5%	7.3%	2.4%
Texas Children's Health Plan	121	20.0	15-36	0.0%	24.0%	35.5%	28.9%	9.1%	2.5%
Texas Tech	228	18.3	11-32	3.5%	43.0%	28.9%	19.7%	3.1%	1.8%
Port Arthur	129	19.5	14-39	0.8%	31.0%	28.7%	32.6%	4.7%	2.3%
The Children's Shelter	267	18.3	12-34	6.7%	48.3%	18.0%	19.1%	6.0%	1.9%
University Health System	245	20.5	13-42	1.6%	32.7%	18.4%	30.2%	11.4%	5.7%
TNFP	2,286	19.1	11-42	4.0%	36.4%	24.3%	25.6%	6.9%	2.8%
National NFP	113,533	19.0	n/a	3.0%	28.0%	27.4%	30.0%	7.9%	3.7%

**Table A-2. Client Primary Language** 

Primary Language†

	Number				Missing
	enrolled	English	Spanish	Other	( <b>n</b> )
Any Baby Can	258	77.3%	21.6%	1.3%	3
Parkland HHS	212	75.3%	23.2%	1.5%	14
Dallas YWCA	248	82.4%	15.8%	1.8%	27
Tarrant County	318	81.8%	16.1%	2.1%	33
Baylor	137	92.7%	6.5%	0.8%	13
Houston DHHS	123	84.6%	15.4%	0.0%	6
Texas Children's Health Plan	121	94.9%	5.1%	0.0%	3
Texas Tech	228	97.8%	1.3%	0.9%	0
Port Arthur	129	90.4%	9.6%	0.0%	14
The Children's Shelter	267	93.7%	5.5%	0.8%	16
University Health System	245	74.5%	25.5%	0.0%	6
TNFP	2,286	85.0%	14.1%	1.0%	135
National NFP*	113,533	84.6%	13.2%	2.2%	65,441

Time period: September 1, 2008 - June 30, 2010

<sup>\*</sup> Data collection of primary language began October 1, 2006; data collection of race/ethnicity is since program inception. The number of clients with primary language data is smaller than the number of clients with race/ethnicity data.

<sup>†</sup> Percentages are calculated for the 2,151 clients whose primary language is known.

Table A-3. Client Marital Status and School Enrollment

		Marital	Status	School Enrollment			
	Number	Percent	Missing		Not	Missing	
	enrolled	Married	(n)	Enrolled	Enrolled	(n)	
Any Baby Can	258	7.8%	3	57.3%	42.7%	5	
Parkland HHS	212	11.5%	12	58.3%	41.7%	13	
Dallas YWCA	248	10.3%	24	47.8%	52.2%	24	
Tarrant County	318	13.6%	31	40.4%	59.6%	31	
Baylor	137	3.9%	10	56.7%	43.3%	10	
Houston DHHS	123	12.7%	5	41.9%	58.1%	6	
Texas Children's Health Plan	121	13.2%	0	39.2%	60.8%	1	
Texas Tech	228	5.3%	1	53.9%	46.1%	0	
Port Arthur	129	10.3%	13	40.5%	59.5%	13	
The Children's Shelter	267	8.7%	14	64.1%	35.9%	16	
University Health System	245	21.8%	7	39.5%	60.5%	7	
TNFP	2,286	10.9%	120	49.9%	50.1%	126	
National NFP*	113,533	16.6%	n/a	44.5%	55.5%	n/a	

**Table A-4. Client Income** 

### **Income**

				1110	Come		<b>-</b>	·
	Number enrolled	<- \$6000	\$6001- \$12000	\$12001- \$20000	\$20001- \$30000	>\$30000	Don't Know (n)	Missing Income (n)
Any Baby Can	258	19.4%	12.8%	19.4%	11.6%	8.1%	69	5
Parkland HHS	212	10.4%	4.7%	5.2%	3.8%	0.9%	146	13
Dallas YWCA	248	15.7%	20.2%	23.0%	16.5%	13.3%	4	24
Tarrant County	318	12.6%	10.4%	15.4%	15.1%	8.2%	90	32
Baylor	137	13.1%	5.1%	12.4%	10.9%	8.0%	59	10
Houston DHHS	123	20.3%	10.6%	24.4%	4.1%	1.6%	43	5
Texas Children's Health Plan	121	19.0%	9.1%	15.7%	5.8%	5.8%	53	1
Texas Tech	228	18.9%	15.4%	23.7%	9.2%	10.1%	51	1
Port Arthur	129	21.7%	11.6%	15.5%	13.2%	4.7%	30	13
The Children's Shelter	267	22.5%	10.9%	13.9%	10.1%	6.7%	80	16
University Health System	245	10.6%	7.8%	18.4%	6.5%	4.5%	121	7
TNFP	2,286	26.5%	18.0%	27.5%	16.6%	11.3%	746	127
National NFP*	113,533	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Time period: September 1, 2008 - June 30, 2010

<sup>\*</sup> National NFP data are not available by income bracket. The median income for the national database is \$13,500 with a range from \$1,500 to \$45,000.

### APPENDIX B: ADHERENCE TO NFP MODEL STANDARDS

Table B-1. Standard 4 - Client Enrollment

	Number enrolled	Less than 28 Week Gestation	Over 28 Weeks Gestation*
Any Baby Can (N=258)	258	96.5%	3.5%
Parkland HHS (N=212)	212	95.8%	4.2%
Dallas YWCA (N=248)	248	96.0%	4.0%
Tarrant County (N=318)	318	95.9%	4.1%
Baylor (N=137)	137	92.7%	7.3%
Houston DHHS (N=123)	123	97.6%	2.4%
Texas Children's Health Plan (N=121)	121	95.9%	4.1%
Texas Tech (N=228)	228	99.6%	0.4%
Port Arthur (N=129)	129	92.2%	7.8%
The Children's Shelter (N=267)	267	95.1%	4.9%
University Health System (N=245)	245	96.7%	3.3%
TNFP (N=2,286)	2,286	96.0%	4.0%
National NFP**	113,533	94.1%	5.9%

Time period: September 1, 2008 - June 30, 2010

<sup>\*</sup>Gestational age is self-reported by the client at time of intake and may change after future clinical measures (ultrasound) indicate greater gestational age.

<sup>\*\*</sup> All national NFP numbers in this table were based on cumulative data from October 1, 2006 (when NFP introduced new data collection forms) through the end of the quarter.

Table B-2. Standard 5 – Family Involvement

		Preg	gnancy	Infancy		
	Number enrolled	Client's Mother	Client's Husband or Partner	Client's Mother	Client's Husband or Partner	
Any Baby Can	258	11.9%	12.7%	6.3%	15.3%	
Parkland HHS	212	19.5%	11.6%	12.7%	15.6%	
Dallas YWCA	248	9.0%	9.5%	13.6%	6.0%	
Tarrant County	318	10.3%	12.7%	11.4%	11.6%	
Baylor	137	8.2%	10.0%	9.4%	5.5%	
Houston DHHS	123	9.1%	15.1%	15.0%	30.0%	
Texas Children's Health Plan	121	19.2%	18.5%	7.8%	16.5%	
Texas Tech	228	19.8%	20.3%	11.7%	12.3%	
Port Arthur	129	9.7%	18.2%	8.0%	27.0%	
The Children's Shelter	267	19.7%	17.7%	14.7%	17.5%	
University Health System	245	9.2%	21.5%	13.9%	26.0%	
TNFP (N=2,286)	2,286	13.3%	15.2%	11.0%	15.4%	
National NFP	113,533	8.8%	12.9%	8.9%	11.4%	

Table B-3. Standard 6 – Location of Home Visit

	Number enrolled	Client's Home	Doctor's Office or Clinic	Client's Workplace	Home of Family or Friend	Client's School	Other	Total
Any Baby Can	258	82.7%	0.2%	0.1%	5.6%	7.4%	3.0%	2,868
Parkland HHS	212	92.8%	0.3%	0.2%	3.1%	2.3%	1.3%	2,356
Dallas YWCA*	248	91.7%	0.4%	0.8%	4.6%	0.5%	2.1%	3,531
Tarrant County*	318	75.0%	0.8%	0.6%	15.1%	2.5%	6.0%	3,387
Baylor (N=137)	137	91.6%	0.1%	0.1%	5.4%	0.8%	1.8%	1,527
Houston DHHS*	123	88.1%	0.6%	0.3%	6.5%	0.2%	4.2%	1,635
Texas Children's Health Plan	121	84.4%	0.8%	0.8%	7.5%	0.2%	6.3%	1,611
Texas Tech	228	87.7%	0.4%	0.2%	8.1%	1.7%	2.0%	3,237
Port Arthur	129	83.7%	0.7%	0.2%	10.0%	0.0%	5.4%	1,544
The Children's Shelter	267	85.7%	0.6%	0.3%	7.1%	1.6%	4.4%	4,503
University Health System	245	85.4%	0.4%	0.1%	13.1%	0.1%	0.8%	3,229
TNFP	2,286	85.9%	0.5%	0.3%	8.1%	1.8%	3.3%	29,428

Time period: September 1, 2008 - June 30, 2010

<sup>\*</sup>Percentages for the Houston DHHS, Tarrant County, and Dallas YWCA program sites are based on 2009 and 2010 data only.

 $\begin{tabular}{ll} \textbf{Table B-4. Standard 10 - Content of Home Visits during Pregnancy} \\ \end{tabular}$ 

# Mean Percent of Time Spent on Each Topic Area

	Number of Visits	Personal Health	Environmental Health	Life Course Development	Maternal Role	Friends & Family
Any Baby Can	1,442	41.3%	9.5%	14.6%	19.9%	14.7%
Parkland HHS	1,152	42.3%	12.1%	12.5%	20.4%	12.7%
Dallas YWCA	1,565	42.0%	11.7%	12.0%	22.2%	12.2%
Tarrant County	1,794	45.4%	8.5%	10.5%	20.2%	15.4%
Baylor	828	28.0%	17.4%	17.9%	22.8%	14.0%
Houston DHHS	934	43.8%	10.1%	12.4%	19.5%	14.3%
Texas Children's Health Plan	689	36.8%	11.8%	14.1%	18.0%	19.4%
Texas Tech	1,360	37.0%	11.3%	13.8%	23.0%	14.9%
Port Arthur	755	44.3%	8.2%	11.0%	22.3%	14.2%
The Children's Shelter	2,099	43.2%	9.1%	13.2%	21.7%	12.9%
University Health System	1,527	47.5%	9.7%	11.2%	20.1%	11.4%
TNFP	14,145	41.8%	10.5%	12.8%	21.0%	13.9%
National NFP	n/a	39.7%	10.0%	11.9%	25.1%	13.3%
NFP Objective	n/a	35-40%	5-7%	10-15%	23-25%	10-15%

Table B-5. Standard 10 - Content of Home Visits during Postpartum (Birth to 6 weeks)

Mean Percent of Time Spent on Each Topic Area

	Number of Visits	Personal Health	Environmental Health	Life Course Development	Maternal Role	Friends & Family
Any Baby Can	376	26.2%	10.0%	11.4%	39.5%	13.0%
Parkland HHS	317	27.6%	10.9%	10.3%	39.4%	11.8%
Dallas YWCA	468	26.3%	10.1%	11.1%	41.8%	10.8%
Tarrant County	512	25.6%	7.6%	8.7%	46.0%	12.1%
Baylor	179	22.8%	13.9%	15.2%	36.5%	11.7%
Houston DHHS	230	28.7%	9.1%	11.7%	37.6%	12.9%
Texas Children's Health Plan	219	24.5%	10.7%	12.3%	36.9%	15.7%
Texas Tech	477	28.1%	8.8%	11.7%	39.0%	12.4%
Port Arthur	175	28.5%	6.8%	8.6%	43.3%	12.8%
The Children's Shelter	633	30.7%	8.1%	10.5%	39.6%	11.2%
University Health System	436	33.6%	8.1%	10.5%	36.7%	11.1%
TNFP	4,022	28.0%	9.1%	10.8%	40.0%	12.0%
National NFP	n/a	n/a	n/a	n/a	n/a	n/a
NFP Objective	n/a	n/a	n/a	n/a	n/a	n/a

Table B-6. Standard 10 - Content of Home Visits during Infancy (7 weeks to 52 weeks )

## **Mean Percent of Time Spent on Each Topic Area**

	Number of Visits	Personal Health	Environmental Health	Life Course Development	Maternal Role	Friends & Family
Any Baby Can	184	20.0%	12.8%	19.7%	35.0%	12.6%
Parkland HHS	67	25.7%	12.2%	10.6%	40.8%	10.8%
Dallas YWCA	208	25.4%	12.3%	11.5%	40.2%	10.6%
Tarrant County	115	20.7%	9.6%	13.3%	44.0%	12.4%
Baylor	95	22.9%	17.9%	17.9%	27.3%	14.0%
Houston DHHS	8	21.3%	9.4%	13.4%	36.6%	19.4%
Texas Children's Health Plan	135	15.3%	16.7%	18.8%	34.1%	15.2%
Texas Tech	269	19.4%	14.0%	16.7%	36.1%	13.8%
Port Arthur	79	18.7%	9.9%	17.2%	36.5%	17.8%
The Children's Shelter	286	22.2%	9.4%	14.5%	41.2%	12.7%
University Health System	174	25.8%	12.5%	14.8%	35.6%	11.3%
TNFP	1,620	21.6%	12.5%	15.5%	37.4%	12.9%
National NFP	n/a	19.6%	10.8%	13.2%	43.1%	13.2%
NFP Objective	n/a	14-20%	7-10%	10-15%	45-50%	10-15%

Table B-7. Standard 14 – Nursing Supervisor's Provision of Clinical Supervision.

	Average Number One to One Visits Per Month	Average Number of Case Conferences/ Team Meetings Per Month	Average Number of Supervised Joint Home Visits Per Nurse*
Any Baby Can	3.0	4.0	1.4
Parkland HHS	1.9	3.9	9.0
Dallas YWCA	3.1	3.8	2.9
Tarrant County	2.8	3.6	1.8
Baylor	3.4	3.9	4.3
Houston DHHS	3.0	4.1	3.2
Texas Children's Health Plan	3.6	4.1	2.0
Texas Tech	3.1	4.0	5.9
Port Arthur	3.3	6.2	2.1
The Children's Shelter	3.6	4.1	2.2
University Health System	3.4	4.2	2.3
TNFP	3.1	4.2	2.3**
TNFP Objective	4.0	4.0	3.0
National NFP Minimum Threshold	3.0	3.4	3.0

<sup>\*</sup> NFPNSO guidelines recommend one visit per quarter per nurse.

\*\* Due to high numbers at Parkland HHS and Texas Tech, the median value was used as a measure of central tendency.

### APPENDIX C: TNFP PROGRAM OUTCOMES

Table C-1. Goal 2 – Improve Child Health and Development Percent of TNFP Children Who Received Scheduled Immunizations

	Number of Infants	Percent with Up-to-date Immunizations at Six Months	Number of Infants	Percent with Up-to-date Immunizations at 12 Months
TNFP	582	86.0%	82	82.0%
National NFP	19,648	86.0%	15,705	85.0%

Time period: September 1, 2008 - June 30, 2010

Table C-2. Goal 2 – Improve Child Health and Development Percent of TNFP Children Screened for Lead Exposure

	Number of Infants	Percent Tested at Six Months	Number of Infants	Percent Tested at 12 Months
TNFP*	441	10.0%	57	32.0%
National NFP**	n/a	4.0%	n/a	29.0%

Time period: September 1, 2008 - June 30, 2010

Table C-3. Goal 2 – Improve Child Health and Development Developmental Delays

		Ages and Stages ASQ		<b>Ages and Stages ES</b>		
	Number of Infants	Percent Assessed at 4-months*	Required Additional Assessment	Percent Assessed at 6 months**	Required Additional Assessment	
TNFP	573	83.1%	10.5%	85.2%	8.6%	
National NFP	n/a	69.1%	10.4%	56.6%	4.2%	

<sup>\*</sup> None of the TNFP tests were positive for lead exposure.

<sup>\*\*</sup> Two percent of National NFP tests were positive for lead exposure.

<sup>\*</sup>Ages and Stages-ASQ is also assessed at 10-14- and 20-months. Current data is insufficient for reporting at these time points.

<sup>\*\*</sup> Ages and Stages-ES is also assessed at 12- 18- and 24-months. Current data is insufficient for reporting at these time points.

Table C-4. Goal 3 – Improve Family Economic Self-Sufficiency and Stability Substance Abuse During Pregnancy

Smoked > 5 Cigarettes

	Cigarettes	in Last 48 Hours	Marijuana	Alcohol	Cocaine	Other Drugs
Frequency at program intake	58	17	9	11	1	2
Frequency at 36 weeks gestation	42	12	2	12	0	0
TNFP percent change	-28.0%	-29.0%	-78.0%	9.0%	-100.0%	-100.0%
National NFP percent change	-16.0%	-15.0%	-58.0%	-29.0%	-24.0%	-31.0%

Time period: September 1, 2008 - June 30, 2010

Table C-5. Goal 3 – Improve Family Economic Self-Sufficiency and Stability Domestic Violence

	Physical Abuse	Fear of Partner
Frequency at intake	87	62
Frequency at 36 weeks	46	33
TNFP percent change	-47.0%	-47.0%
National NFP percent change	-42.0%	-50.0%